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Fact Sheet

11/03/00

EPA REISSUES AIR TOXICS RULES FOR

SMALL MUNICIPAL WASTE COMBUSTION UNITS

TODAY'S ACTION

- The Environmental Protection Agency (EPA) is issuing a rule to reestablish air regulations for small municipal waste combustion (MWC) units. The rule will reduce emissions of toxic air pollutants, including dioxins and mercury, from small waste-to-energy plants and incinerators.

- Air toxics are the pollutants known, or suspected, to cause cancer and other health problems. A small municipal waste combustion (MWC) unit is an incinerator with the capacity to burn between 35 and 250 tons of garbage per day.
- Today's rule applies to the burning of municipal waste or trash, including discards from residential housing, apartments, restaurants, shopping centers office buildings and other similar waste. The rule does not cover the combustion of hazardous waste, industrial manufacturing waste, or medical waste; which are regulated under other standards.
- The rule applies to the 90 existing waste-to-energy units and incinerators and any future waste to energy plants (waste to energy plants generate energy from garbage). Existing units are the units that are constructed on or before August 30, 1999 (the date the rule was proposed); new units are the units constructed after that date.
- To develop the rule, EPA worked closely with industry, environmental groups, Sate and local agencies, the National Association of Counties, the U.S. Conference of Mayors, and other stakeholders.

BENEFITS AND COST

- Once fully implemented (by 2005), the rule will reduce emissions of a numbei of air pollutants including dioxins/furans, metals and acid gases by approximately 5,700 tons per year.

- Dioxins: By 2005, the rule will reduce dioxin emissions from small MWC units by more than 90 percent over 1990 levels. Together, the rule and EPA's 1995 rule for large MWC units will reduce dioxin emissions from both large and small municipal waste combustors to less than 1 percent of 1990 levels.
- Dioxin is a pollutant of particular concern because it persists in the environment and bioaccumulates. Those characteristics cause dioxin to move through the food chain and biomagnify. When a pollutant *biomagnifies,* it increases in concentration in tissues as it moves through the food chain, from algae or sediments to shellfish to fish to fish-eating birds and mammals. Dioxin exposure has been associated with reproductive and developmental effects in humans.

- Mercury: By 2005, the rule will reduce mercury emissions from small MWC units by more than 90 percent over 1990 levels. Together, the rule and EPA's 1995 regulations for large MWC units, will reduce mercury emissions from large and small municipal waste combustors by 92 percent. Mercury is highly toxic, persistent in the environment and bioaccumulates, particularly in fish. Human exposure to mercury occurs primarily through the food chain. Mercury exposure can cause health problems in humans and animals, including birth and developmental effects.

- For the 90 existing small MWC units and the 5 new units EPA estimates will be built by 2005, the estimated total cost for the regulations would be $76 million a year. For a community where an existing small MWC unit is used for municipal solid waste disposal and where the MWC must be retrofitted, the average cost increase for solid waste disposal would be about $2.00 per month per household. Those communities will receive the direct benefit of the reduced air emissions.

WHAT THE RULE REQUIRES

- The rule reestablishes new source performance standards for new small MWC units and emission guidelines for existing small MWC units. When fully implemented, the rule will result in the application of maximum achievable control technology to all small MWC units.
- The rule requires small MWC units to meet stringent emission limits for organics (dioxin/furans), metals (cadmium, lead, mercury, and particulate matter), and acid gases (hydrogen chloride, sulfur dioxide, and nitrogen oxides). The emission limits are based on the application of pollution controls known as maximum achievable control technology, or MACT.

BACKGROUND

- Under section 129 of the Clean Air Act Amendments of 1990, EPA is required to revise its earlier MWC rule to address additional pollutants and to regulate both large and small MWC units based on maximum achievable control technology (MACT). EPA proposed the revised rule in September 1994 and promulgated the revised rule in December 1995.
- In 1996, two petitions were filed with the court challenging that two separate regulations should have been established: one for large MWC units and one for small MWC units. On April 8, 1997, the U.S. Court of Appeals for the District of Columbia Circuit issued an order requiring EPA to establish separate rules for small and large MWC units.

- EPA proposed rules to establish separate regulations for small MWC units on August 30, 1999.
- About 70 percent of the small MWC units affected by today's rule are publicly owned; the remaining 30 percent privately owned.

FOR MORE INFORMATION

- Visit EPA's web site for small MWCs at: http://*www.epa.gov/ttn/atw/129/mwc/ rimwc2.html* or contact Rick Copland at (919)541-5265.

- EPA's Office of Air and Radiation's home page on the Internet contains a wide range of information on the air pollution programs including air toxics issues. The Office of Air and Radiation's home page address is: *http://www.epa.gov/oar/.*